Safety – It's Personal

Critical Days of Summer

25 May – 4 September 2012

Air Force Critical Days of Summer 2012

The objective of the Air Force Critical Days of Summer Campaign 2012 is to call attention to the tragic loss and/or injury of Airmen during the summertime and to make Airmen realize that safety is personal for them, their families, friends and co-workers.

Modules can be used in any order to suit the needs of each installation.

Table of Contents

**Module order is listed by week; this is only a suggestion. The modules are intended for use in any order as needed for local requirements.*

Critical Days of Summer 2012

Why the need for a summer safety campaign? Since FY02 the Air Force has experienced 237 fatalities during the Critical Days of Summer (219 off-duty, 18 on-duty).

This year we have designated the time period of *25 May through 4 September 2012* as the Air Force Safety Center's "Critical Days of Summer" safety campaign. Our vision this year is to ensure all of our Airmen have zero preventable fatal mishaps and an injury-free summer.

Module 1

Wingmen: It's Personal – Take Care of Each Other

When we join the Air Force, we become part of a unique culture. The foundation of this culture is the Air Force core values: integrity first, service before self and excellence in all we do. This culture and these core values compel Airmen to take care of Airmen. We accomplish our mission as a dedicated team of Airmen committed to our core values and to each other. The commitment to take care of each other comes from within. We all have families, friends and co-workers who are important in our lives. When you commit to take care of them, it *is* personal – these are the people that mean the most to you.

According to Gen. Norton Schwartz, CSAF, "A big part of being effective wingmen is looking out for each other."

Follow this link to see the view from the top on wingmen and resiliency:
http://www.af.mil/news/story.asp?id=123272746

Gen. Jumper's introduction to the wingman culture and its importance for Airmen to take care of each other:
http://airforcemedicine.afms.mil/sg_newswire/jul_05/IamAwingman.htm

This AMC article supports the value of taking care of each other:
http://paraglideonline.net/050511_Flightline2.html

Module 2

Sober is Safer: Thinking Then Drinking

Drinking has become a part of many summer pastimes – before, during and after. While most people are aware of the hazards of drinking and driving; there are many more situations where alcohol becomes a danger. Consider the consequences before you begin your summer fun; your safety, as well as the safety of others, will depend on your clear thinking. Develop your plan before rather than after and stick to it. Whether it's having a designated driver or choosing to stay sober while you participate in outdoor activities, you will have fun knowing you've taken steps to prevent injury or death.

From the National Institutes of Health (NIH)
http://www.nlm.nih.gov/medlineplus/ency/article/001944.htm

The Effects of Alcohol:

Alcoholic drinks have different amounts of alcohol in them and alcohol gets into your bloodstream quickly:

- Beer is about 5 percent alcohol, although darker beers and ales can have more
- Wine is usually 12 – 15 percent alcohol
- Hard liquor is about 45 percent alcohol

The amount and type of food in your stomach can change how quickly alcohol enters your bloodstream. For example, high-carbohydrate and high-fat foods can make your body absorb alcohol more slowly.

Certain types of alcoholic drinks get into your bloodstream faster. A carbonated (fizzy) alcoholic drink, such as champagne, will be absorbed faster than a non-carbonated drink.

Alcohol slows your breathing rate, heart rate, and how well your brain functions. These effects may appear within 10 minutes and peak at around 40 - 60 minutes. Alcohol stays in your bloodstream until it is broken down by the liver. The amount of alcohol in your blood is called your "blood alcohol level." If you drink alcohol faster than the liver can break it down, this level will rise.

Your blood alcohol level is used to legally define whether or not you are "drunk." The blood alcohol legal limit usually falls between 0.08 and 0.10 in most states. Below is a list of blood alcohol levels and the likely symptoms.

- 0.05 -- reduced inhibitions
- 0.10 -- slurred speech
- 0.20 -- euphoria and motor impairment
- 0.30 -- confusion
- 0.40 -- stupor
- 0.50 -- coma
- 0.60 -- respiratory paralysis and death

Additional resources:

http://trafficsafety.org/safety/risk/impaired-driving-resources

http://allirainey.suite101.com/how-drinking-alcohol-can-impact-your-rock-climbing-performance-a332080

http://www.oregon.gov/OSMB/news/media_kit/11BuiiFacts.pdf?ga=t

http://www.uscgboating.org/safety/boating_under_the_influence_initiatives.aspx

Module 3

PMV-4 – Slow Down; Pay Attention
ATV

Private Motor Vehicle mishaps are a serious danger to our safety. In the Air Force, reckless behavior includes excessive speed, alcohol use, no seat belt use or extreme maneuvers (surfing, racing, etc.); 86 percent of PMV-4 fatality mishaps (as of 30 Sept 2011) were attributable to these factors. It is this behavior that continues to be a threat to our Airmen.

Speeding
According to the National Safety Council website:
http://www.nsc.org/safety_road/DriverSafety/Pages/Speeding.aspx

Speed is involved in about one out of three fatal crashes, according to NHTSA. It is the third leading contributing factor to traffic crashes. But while injuries and fatalities due to other dangerous behaviors, such as driving while impaired and not wearing seatbelts, have been significantly reduced, speeding is still a challenge.

Drivers speed because:
- They're in a hurry.
- They're inattentive to their driving.
- They don't take traffic laws seriously; they don't think the laws apply to them.
- They don't view their driving behavior as dangerous.
- They don't expect to get caught.
- Some or all of the above.

Speeding results in:
- *Lives lost* – over 13,000 each year.
- *Work zone crashes and fatalities* – speed was a factor in 27 percent of fatal crashes in construction and maintenance zones in 2005.
- *Unsafe school zones* – compliance with lower speed limits is poor.
- *Economic costs* – speed-related crashes cost society over $40 billion annually, according to NHTSA. Every minute "gained" by speeding to a destination costs U.S. society over $76,000.

Aggressive Driving
What is aggressive driving? Most of us know it when we see it, but NHTSA, after discussions with law enforcement and the judiciary, defines aggressive driving as occurring when "an individual commits a combination of moving traffic offenses so as to endanger other persons or property.

For more info:
http://www.nhtsa.gov/Aggressive

Distracted Driving
What is Distracted Driving?

According to the http://www.distraction.gov/ *website:*

Distracted driving is any activity that could divert a person's attention away from the primary task of driving. *All* distractions endanger driver, passenger, and bystander safety. These types of distractions include:

- Texting
- Using a cell phone or smart phone
- Eating and drinking
- Talking to passengers
- Grooming
- Reading, including maps
- Using a navigation system
- Watching a video
- Adjusting a radio, CD player, or MP3 player

Distractions can be broken into three main types:

- Manual: taking your hands off the wheel
- Visual: taking your eyes off the road
- Cognitive: taking your mind off driving

Because text messaging requires visual, manual, and cognitive attention from the driver, it is by far the most alarming distraction.
http://www.distraction.gov/content/get-the-facts/facts-and-statistics.html

Every 24 seconds there is a crash involving drivers using cell phones and texting.
http://www.nsc.org/safety_road/Distracted_Driving/Pages/distracted_driving.aspx

More info on distracted driving:
http://www.osha.gov/distracted-driving/index.html
http://www.aaafoundation.org/multimedia/distracteddriving.cfm

ATV

All-Terrain Vehicles are a pastime many people enjoy. However, they also present their own risks. The ATV Safety Institute promotes the following rules when operating an ATV:

- Always wear a DOT-compliant helmet, goggles, long sleeves, long pants, over-the-ankle boots and gloves
- Never ride on paved roads except to cross when done safely and permitted by law. ATVs are designed to be operated off-highway
- Never ride under the influence of alcohol or drugs
- Never carry a passenger on a single-rider ATV and no more than one passenger on an ATV specifically designed for two people
- Ride an ATV that is right for your age
- Supervise riders younger than 16; ATVs are not toys
- Ride only on designated trails and at a safe speed
- Take a hands-on ATV course such as the one at the website below.

For more info:
http://www.atvsafety.org/
http://www.treadlightly.org/page.php/home/Home.html

http://www.atvsafety.gov/
http://www.cpsc.gov/nsn/atv.html

Module 4

Trip Planning

School's out for summer! Travel plans for the season must always include planning and risk management. Before you hit the road consider the long distance driving risks as well as how you pack your car. The risk management steps – ABCDD – are a great tool to use.

- ***A***ssess the situation: Identify and assess the hazards associated with a particular mission or activity
- ***B***alance Controls: Consider all available controls (resources) available to ensure success or mitigate identified hazards
- ***C***ommunicate: Communicate with leadership or others to discuss problems, intentions & possible alternatives. In individual situations carefully consider personal actions before deciding upon & implementing a final course of action
- ***D***ecide and ***D***ebrief: Make the decision to continue, modify or abandon the mission or activity based upon real-time circumstances and conditions. Provide feedback on what worked and what did not work to ensure important lessons learned are passed to others; your experience can help save lives!

The TRiPS Planning Tool will also help mitigate many hazards associated with your vacation. TRiPS is an on-line, automated driving risk-assessment tool, hosted by the Army Combat Readiness Center for the Air Force. You use it before going on leave especially when driving outside command travel limits. The system helps you and your supervisor recognize, and avoid, common hazards everyone faces on the highway: fatigue, not buckling up, speed, and distractions. A typical TRiPS session takes less than 10 minutes. You input information about your travel plans and driving habits and TRiPS presents your overall risk assessment, a map of your route, links to state highway information and weather conditions, examples of mishaps, and offers you and your supervisor suggestions to reduce that risk. (For OCONUS this can also be a helpful guide.)

https://www.my.af.mil/gcss-af/USAF/ep/browse.do?programId=t6925EC3163FF0FB5E044080020E329A9&channelPageId=s6925EC13537F0FB5E044080020E329A9

Other resources

http://www.dot.gov.nt.ca/_live/pages/wpPages/SafeTravelPlan.aspx
http://www.planning-fun-road-trips.com/road-trip-planner.html

Module 5

Celebrate the 4th – Live to See the 5th

The Fourth of July is always a fun time to gather with family and friends to acknowledge the nation's birthday. Fireworks are a wonderful way to celebrate the holiday, but they must be used carefully. The *National Council on Fireworks Safety* urges consumers to be smart when it comes to fireworks.

Here's a short list of tips:

- Use fireworks outdoors only.
- Obey local laws. If fireworks are not legal where you live, do not use them.
- Always have water handy. (A hose or bucket).
- Only use fireworks as intended. Don't try to alter them or combine them.
- Never relight a "dud" firework. Wait 20 minutes and then soak it in a bucket of water.
- Use common sense. Spectators should keep a safe distance from the shooter and the shooter should wear safety glasses.
- Alcohol and fireworks do not mix. Have a "designated shooter."
- Only persons over the age of 12 should be allowed to handle sparklers of any type.
- Do not ever use homemade fireworks of illegal explosives: They can kill you! Report illegal explosives to the fire or police department in your community.

For more info:

http://www.fireworkssafety.org/
http://www.cpsc.gov/info/fireworks/index.html
http://www.nfpa.org/assets/files//PDF/fireworksfactsheet.pdf
http://www.nfpa.org/assets/files/pdf/os.fireworks.pdf
http://www.cdc.gov/HomeandRecreationalSafety/Fireworks/fire_spot.html

Module 6

PMV-2 – Ride Smart
Motorcycles
Bicycles

When you think of PMV-2, motorcycles always come to mind. This module will address motorcycles as well as another popular summer PMV-2 – bicycles.

Motorcycles

According to Research and Innovative Technology Administration (RITA), an arm of the U.S. Department of Transportation, there were 7,929,724 motorcycles in the United States as of 2009 (1995-2009: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics* (Washington, DC: Annual Issues)**,** table VM-1, available at http://www.fhwa.dot.gov/policyinformation/statistics.cfm as of Nov. 14, 2011.

As reported by www.Trafficsafety.org: Motorcycle Crash Facts

Motorcyclist Fatalities Increase

- Motorcycles are the most dangerous type of motor vehicle to drive. These vehicles are involved in fatal crashes at a rate of 35.0 per 100 million miles of travel, compared with a rate of 1.7 per 100 million miles of travel for passenger cars.
- Motorcyclists were 35 times more likely than passenger car occupants to die in a crash in 2006, per vehicle mile traveled, and 8 times more likely to be injured.
- Although motorcycles account for only 2% of vehicles on the road, they make up more than 10% of all crashes.
- Motorcycles accounted for nearly 3% of all registered motor vehicles and 0.4% of vehicle miles traveled in 2006.
- Motorcycle fatalities have more than doubled in 10 years to 4,810 in 2006. Helmets saved the lives of 1,658 motorcyclists in 2006—and could have saved an additional 752 lives if all riders had worn helmets compliant with federal safety standards.
- Some 104,000 motorcycles were involved in crashes in 2006, including property damage-only crashes.
- Approximately 80% of motorcycle crashes injure or kill a motorcycle rider, while only 20% of passenger car crashes injure or kill a driver or passenger in their vehicle.
- In 2006, 37% of all motorcyclists involved in fatal crashes were speeding, compared to 23% for passenger car drivers, 19% for light-truck drivers, and 8% for large-truck drivers.

For more info see: http://trafficsafety.org/safety/sharing/motorcycle/motor-facts/motor-injuries-fatalities

Prevention is always the best medicine. Here are some resources:

http://www.ridesmartflorida.com/index.htm
http://www.rospa.com/roadsafety/info/ridesafe.pdf
http://www.carinsurancelist.com/article-motorcycle-accident-stats.htm

Bicycles

As published by the NHTSA, bicycles in many States are considered vehicles, and cyclists have the same rights and the same responsibilities to follow the rules of the road as motorists. When OCONUS, be sure to follow the host country laws in additional to following on-base regulations.

When riding, always:

- **Go With the Traffic Flow.** Ride on the right in the same direction as other vehicles. Go with the flow – not against it.

- **Obey All Traffic Laws.** A bicycle is a vehicle and you're a driver. When you ride in the street, obey all traffic signs, signals, and lane markings.

- **Yield to Traffic When Appropriate.** Almost always, drivers on a smaller road must yield (wait) for traffic on a major or larger road. If there is no stop sign or traffic signal and you are coming from a smaller roadway (out of a driveway, from a sidewalk, a bike path, etc.), you must slow down and look to see if the way is clear before proceeding. This also means yielding to pedestrians who have already entered a crosswalk.

- **Be Predictable.** Ride in a straight line, not in and out of cars. Signal your moves to others.

- **Stay Alert at All Times.** Use your eyes AND ears. Watch out for potholes, cracks, wet leaves, storm grates, railroad tracks, or anything that could make you lose control of your bike. You need your ears to hear traffic and avoid dangerous situations; don't wear a headset when you ride.

- **Look Before Turning.** When turning left or right, always look behind you for a break in traffic, then signal before making the turn. Watch for left- or right-turning traffic.

- **Watch for Parked Cars.** Ride far enough out from the curb to avoid the unexpected from parked cars (like doors opening, or cars pulling out).

(from http://www.nhtsa.gov/people/injury/pedbimot/bike/kidsandbikesafetyweb/)

Additional resources:

http://bicyclesafe.com/
http://www.cpsc.gov/cpscpub/pubs/341.pdf
http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Associated%20Files/BikeSafetyforAdults.pdf
http://www.livestrong.com/article/155740-adult-bicycle-safety/
http://www.bhsi.org/nhtsapam.htm

Module 7

Enjoy the Great Outdoors Safely
BBQ Safety Tips
Beat the Summer Heat
Summer Weather

There are many different topics to cover in this module. The first, *Enjoy the Great Outdoors Safely*, includes, but not limited to, camping, mowing, outdoor fire safety, etc.

Camping

http://www.campsafe.org/
http://www.cdc.gov/family/camping/

Mowing

While mowing accidents are not publicized often, the severity of the injuries can be devastating. The *U.S. Consumer Product Safety Commission* reports that yearly injuries (treated at emergency rooms) from lawn mowers total more than 70,000 annually. The severity of the incidents is explained by *Herb Willcutt, the Extension Professor and Agricultural Engineer in the Department of Agricultural and Biological Engineering at Mississippi State University*. He states, "The revolving blade of a lawn mower can throw objects at speeds of 200 miles per hour or the length of a football field in 1 second. There is no time to dodge thrown objects. It takes an adult about two-thirds of a second to react to danger and young children may react slower."

For more information see:
http://ntsi.com/quick-links/safety-articles/lawn-mower-safety/
http://www.consumerwatch.com/household/lawn-mowers.php
http://www.amputee-coalition.org/Limb-Loss-Awareness/wp-content/uploads/2011/03/press-release-lawn-mowers-4-26-10.pdf
http://www.assh.org/Public/Safety/Pages/LawnmowerSafety.aspx

BBQ

With warmer weather comes family gatherings and cooking outside on a charcoal or gas grill. Barbequing is a relatively harmless event. However, if safety rules and respect for the dangers of fire are not followed, mishaps can and do occur. Burns, scalds, soft tissue injuries, abrasions and cuts are just a few of the accidents that can occur when grilling.

http://www.nfpa.org/itemDetail.asp?categoryID=298&itemID=18346&URL=Research%20&%20Reports/Fact%20sheets/Seasonal%20safety/Grilling&cookie%5Ftest=1
http://www.cpsc.gov/cpscpub/pubs/467.pdf
http://www.hpba.org/safety-information
http://www.fsis.usda.gov/Factsheets/Barbecue_Food_Safety/
http://www.cpsc.gov/cpscpub/prerel/prhtml97/97128.html

Beat the Summer Heat

As the weather is gets warmer, the potential for heat-related illnesses and injuries, such as dehydration, heat exhaustion and heat stroke increase. Learn the signs of these as well as how to prevent sunburn, sun poisoning and other hazards.

http://www.cdc.gov/cancer/dcpc/publications/skin.htm
http://www.foh.hhs.gov/NYCU/heatdangers.asp
http://www.dodlive.mil/index.php/2011/08/summer-safety-the-dangers-of-extreme-heat/
http://www.nyredcross.org/?nd=summer_heat_safety_guide

Summer Weather

Summer brings some unique weather hazards in many parts of the world. Lightning, tornadoes, typhoons and hurricanes are the ones that can be extremely dangerous. According to the National Weather Service, there are approximately 16 million storms a year. And in the United States, there are an estimated 25 million cloud-to-ground lightning flashes each year. The average number of fatalities in the U.S. is 61. However, due to under reporting, it is estimated that, more realistically, about 100 - 120 deaths per year occur because of lightning. Documented lightning injuries in the United States average 300 per year; however undocumented lightning injuries are likely much higher.

http://www.lightningsafety.noaa.gov/outdoors.htm
http://www.fs.fed.us/recreation/safety/
http://www.ready.gov/tornadoes
http://www.redcross.org/www-files/Documents/pdf/Preparedness/checklists/Tornado.pdf

In the Sun

According to the *University of California at San Francisco's School of Medicine*, "Sunblock protects your skin by absorbing and/or reflecting UVA and UVB radiation. All sunblocks have a Sun Protection Factor rating. The SPF rating indicates how long a sunscreen remains effective on the skin. A user can determine how long their sunblock will be effective by multiplying the SPF factor by the length of time it takes for him or her to suffer a burn without sunscreen."

The *American Association of Dermatology* recommends that a broad spectrum sunblock with an SPF of at least 15 be applied daily to all sun exposed areas and reapplied every two hours. Some recent clinical trials show sunblock with SPF 30 provided significantly better protection than sunblock with SPF15.

http://www.mayoclinic.com/health/sunburn/DS00964/DSECTION=prevention
http://www.cdc.gov/cancer/skin/basic_info/prevention.htm
http://www.cdc.gov/features/movingoutdoors/
http://wwwnc.cdc.gov/travel/yellowbook/2012/chapter-2-the-pre-travel-consultation/sunburn.htm

Module 8

Sports & Rec, not Wreck

Who Is at Greatest Risk for Sports Injuries?

According to the National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, if a professional athlete dislocates a joint or tears a ligament, it makes the news. But anyone who plays sports can be injured. Three groups—children and adolescents, middle-aged athletes, and women—are particularly vulnerable. While all Airmen are in good physical condition, family members may not be as ready for summer activities. But whether or not you're conditioned, injuries happen.

Since October 2010 there have been 1259 reported sports and recreation mishaps: 6 Class A; 5 Class B and 1,248 Class C. During the 2011 Critical Days of Summer, there were 354 mishaps: 3 Class A and 351 Class C. Any one of those Class C mishaps has the potential to becoming more severe. These statistics are only the active duty incidents. Imagine the numbers if we were to include family members.

What Can Groups at High Risk Do to Prevent Sports Injuries?

Anyone who exercises is potentially at risk for a sports injury and should follow the injury prevention tips. But additional measures can and should be taken.

http://www.google.com/url?sa=t&rct=j&q=sports%20recreation%20safety&source=web&cd=134&ved=0CD0QFjADOIIB&url=http%3A%2F%2Fwww.public.navy.mil%2Fnavsafecen%2FDocuments%2Fseasonal%2FSummer%2520Campaign%2FSafety_Tips_Recreation_2011%2520Autosaved.ppt&ei=Tx9FT6PkO4bhiAKbie3iDg&usg=AFQjCNE4lEcG3xABsfpGwtSb3EUXbz6A0w

http://www.niams.nih.gov/Health_Info/Sports_Injuries/default.asp
http://www.ok.gov/health/Disease,_Prevention,_Preparedness/Injury_Prevention_Service/Fact_Sheets/Sports_and_Recreation/index.html

http://www.ohsu.edu/xd/health/services/doernbecher/patients-families/safety-center/parents/sports-rec/

Module 9

Water Safety – Have Fun & Be Safe

Of the three Class A mishaps during the 2011 Critical Days of Summer 2011, two were due to drowning. Water accidents can happen very quickly. For this reason preparation for all water activities is vital.

A recent *American Red Cross* survey shows that almost half the adults surveyed on water safety say they've had an experience where they nearly drowned, and one in four know someone who has drowned.

For many water sports are an important part of summer. Preventing tragedy takes many forms. Examples include: learn lifesaving techniques; learn CPR; know your water-sport vehicle and the limitations of the machine; know your skills and stay within those boundaries; ensure safety equipment is operational and never mix alcohol with water activities. The following information can save lives.

General water safety tips

http://www2.redcross.org/services/hss/tips/healthtips/safetywater.html
http://www.redcross.org/portal/site/en/menuitem.53fabf6cc033f17a2b1ecfbf43181aa0/?vgnextoid=a6c9f837443d0210VgnVCM10000089f0870aRCRD
http://watersafety.usace.army.mil/safetytips.htm

Boating

Although boating does not account for many mishaps in the Air Force, the potential for injury or death remains a concern.

http://www.uscgboating.org/safety/default.aspx
http://www.boatingsafety.com/
http://www.safeboatingcouncil.org/
http://www.boatingbasicsonline.com/
http://www.boatus.org/onlinecourse/default.asp

Swimming

http://american.redcross.org/site/DocServer/watersafety0609.pdf?docID=735
http://www.cdc.gov/migrated_content/general_information/healthyswimming/safeswimming.html
http://www.ripcurrents.noaa.gov/tips.shtml
http://www.poolsafely.gov/

Other water sports

http://www.surfinghandbook.com/knowledge/ocean-safety/
http://hawaii.gov/health/family-child-health/ems/pdf/bigsurftips.pdf
http://hawaii.gov/dlnr/dbor/pwc1.htm
http://www.pwia.org/
http://www.safetyresource.org/water_safety/jet_ski_safety.html

Module 10

Countering Fatigue

Fatigue is often overlooked by many, but it is a normal response to stress, boredom, physical exertion or simply a lack of sleep. With today's increasingly on-the-go, around-the-clock society, sleep deprivation is more prevalent than ever. Sleep is vital to our ability to perform in any situation. According to Talk About Sleep, Inc. sleep is a necessary and vital biological function. It is essential to a person's physical and emotional well being. Studies have shown that without enough sleep, a person's ability to perform even simple tasks declines dramatically.

The average sleep-deprived individual may experience impaired performance, irritability, lack of concentration, and daytime drowsiness. They are less alert, attentive, and unable to concentrate effectively. Additionally, because sleep is linked to restorative processes in the immune system, sleep deprivation in a normal adult causes a biological response similar to the body fighting off an infection.

The consequences of sleep deprivation can be tragic. Some famous examples of severe sleep deprivation include the Exxon Valdez oil spill, the NASA Challenger shuttle explosion, and the Chernobyl nuclear accident. The most common consequence within the Air Force is falling asleep behind the steering wheel.

What can be done to counter fatigue? The references below offer many tips and facts to answer this question.

http://drowsydriving.org/about/facts-and-stats/
http://www.fmcsa.dot.gov/facts-research/research-technology/publications/cmvfatiguestudy.htm
http://www.raa.com.au/page.aspx?TerID=1201
http://facts.circadian.com/facts/
http://trafficsafety.org/safety/risk/driver-fatigue-quiz
http://www.aaafoundation.org/pdf/2010DrowsyDrivingReport.pdf

Firefighter Fatigue Facts

(This information comes from: http://www.mcftoa.org/wp-content/uploads/2011/05/Firefighter-Fatigue-Facts-Safety-Communication-2008-1.pdf and is directed to firefighters, however, it applicable for many career fields and individuals.)

As fire activity increases, it becomes more and more essential that personnel assigned to duty for extended periods of time pay close attention to their level of fatigue. Fatigue is often under estimated by individuals. In fact, numerous studies have identified that significant impacts of fatigue on the human body are often not realized until something negative occurs. A few key points to keep in mind:

1. Repeated loss or lack of sleep results in a phenomenon known as "sleep debt."
2. The "quality" of sleep is just as essential as the quantity of sleep.
3. Adequate work/rest cycles should be followed to prevent negative effects of fatigue.

Fatigue can manifest itself in a variety of forms. It is extremely important that individuals, crews, Team members, support staff, etc, all become aware of the signs and symptoms of fatigue and recognize when intervention is necessary. Supervisors must be informed of potentially dangerous conditions. The effects of fatigue can directly impact our abilities to:

1. Perform various tasks

2. Maintain situational awareness and a high degree of alertness
3. React appropriately in a timely manner and fashion
4. Retain a sharp memory and recollection of information
5. Efficiently process information and make sound decisions
6. Maintain a positive and supportive attitude
7. Control levels of frustration, irritation and aggression

Humans are historically poor at estimating their own levels of fatigue. Accidents occurring as a result of fatigue can be easily prevented by recognizing the signs and alerting supervisors. Supervisors must be diligent in evaluating themselves and their crew for such signs as listed above.

Critical operations do not always lend themselves to afford adequate rest. Incident Commanders, supervisors and individuals must learn to recognize the signs and symptoms of fatigue and report when the presence of such does not provide for safe operations. Operational objectives, strategy and tactics might require modification in order to provide the safest environment for weary resources.

Individuals must be proactive in pursuing adequate rest for themselves and avoiding the traps of fatigue. Take advantage of the work/rest cycles provided and get "quality" rest and sleep. Practice good hygiene and eating habits. Remain hydrated by drinking plenty of fluids before, during and after work shifts. Avoid caffeinated drinks such as coffee, soda and "energy" drinks, which often have the opposite effects of hydration. Report any unsafe levels of fatigue, injuries or illnesses to your immediate supervisor.